DIGITAL PANEL METERS

MODEL LI2X 3 1/2 Digit Loop Powered Meter



- 4-20 mA INPUT
- 31/2 DIGIT DISPLAY
- EASY CALIBRATION AND INSTALLATION
- LOOP-POWERED BACKLIGHTING OPTION
- OPERATING TEMPERATURE RANGE: -40° TO 85°C

DESCRIPTION

The LI2X 3¹/2 digit loop-powered meters are perfect for applications where a simple, inexpensive display is required and no AC power is available. And even if the lighting is poor, the loop-powered backlighting option lets you see the display under any lighting condition. This option gets its power from the 4-20 mA input loop so there is no need for additional wiring and no batteries to ever change. The LI2X is housed in a NEMA 4X enclosure, so it can be installed in just about any non-hazardous area in the plant.

ORDERING INFORMATION

Model Description LI21-1001 NEMA 4X

Loop-powered Meter

LI22-1001 NEMA 4X

Loop-powered Meter with Loop-powered Backlighting

Spec Tech Industrial 203 Vest Ave. Valley Park, MO 63088 Phone: 888 SPECTECH E-mail: sales@spectechind.com www.spectechind.com

APPLICATION INFORMATION

SPECIFICATIONS

INPUT: 4-20 mA

DISPLAY: Sharp, 0.5" high LCD, 31/2 digits, 1999, User

selectable decimal point.

CALIBRATION: 2 Step; Non-interacting zero and span. **CALIBRATION RANGE:** 4 mA input: -500 to +500; 20 mA

input: between 20 to 2000 above 4 mA display.

MAXIMUM INPUT CURRENT: 30 mA

MAXIMUM VOLTAGE DROP: 1.5 VDC @ 20 mA; 3.5 VDC

@ 20 mA with backlighting option. **ACCURACY:** ±0.1% of span, ±1 count.

CONNECTIONS: Removable screw terminal block (provided).

OPERATING TEMPERATURE RANGE: -40 to 85°C

ENCLOSURE: High impact-resistant ABS plastic body, clear ABS plastic cover; NEMA 4X, 1/2" conduit hole provided at base. May be provided on back for panel mounting

applications, call factory for details.

LOOP-POWERED BACKLIGHTING OPTION: Factory installed only. Powered directly off the 4-20 mA loop, no batteries required. The display brightness will increase as the input signal current increases.

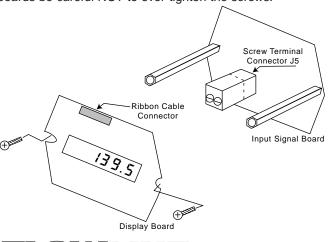
WARRANTY: 1 year parts & labor.

SETUP

The only tools needed for calibration are a calibrated current source and a screwdriver.

DISASSEMBLY

The removable screw terminal connector is located on the lower circuit board. To access these input terminals it is necessary to remove the display board from the input signal board. This is done by first removing the enclosure cover. Next, loosen the 2 screws that hold the display board to the standoffs. Rotate the display board so the right side comes off the standoff first, proceed to remove the display board from both standoffs. Be careful to avoid contact of the display with rough surfaces. The display board may be disconnected from the ribbon cable simply by pulling up on the ribbon cable connector located above the display. Connect a 4-20 mA input signal to terminal J5 located on the input signal board as shown below. When re-assembling the circuit boards be careful NOT to over-tighten the screws.



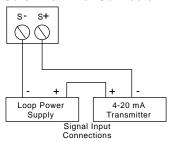


INSTALLATION

Installation of the LI2X involves removing the display board and screw terminal connector. It may also be necessary to remove the input signal board depending on type of conduit hubs used.

CONNECTIONS

Screw Terminal Connector

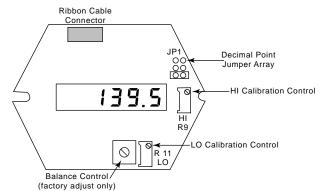


DECIMAL POINT SELECTION

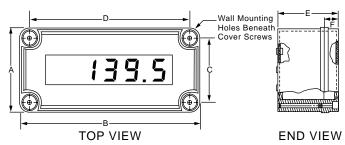
The decimal point jumper array (JP1) is located to the upper right corner of the display board. Place a jumper across the bottom pins for a display of 199.9, across the middle pins for a display of 19.99, and across the top pins for a display of 1.999

CALIBRATION

The LO calibration control (R11) is located below the display and the HI calibration control (R9) is located to the right of the display. Apply a 4 mA input signal and adjust the LO control to display the desired reading. Next, apply a signal between 16 and 20 mA and adjust the HI control to display the desired reading. Complete the calibration procedure by making any minor adjustments to the LO and HI controls.



DIMENSIONS



A. 3.15"

C. 2.36"

B. 4.33"

D. 3.54"